Fig. 11. Colpidium putrinum,  $\times$  300. Fig. 12. Colpidium striatum,  $\times$  450.

Ventral,  $\times$  250. Fig. 13. Diplomastax frontata. Reproductive fission.

Fig. 14. Diplomastax frontata. Fig. 15. Histiobalantium ayile. Fig. 16. Histiobalantium agile. Dorsal,  $\times$  300. Lateral,  $\times$  450.

Fig. 17. Rhabdostyla pusilla,  $\times$  500. Fig. 18. Vorticella Lemnæ,  $\times$  360.

Fig. 19. Balanitozoon agile,  $\times$  810. Fig. 20. Uroleptus Sphagni, x 135.

Fig. 21. Vaginicola ampulla, × 137.

Trenton, New Jersey, U.S. America.

XII.—Descriptions of Sponges from the Neighbourhood of Port Phillip Heads, South Australia, continued. By H. J. CALTER, F.R.S. &c.

[Continued from p. 53.]

Fam. 2. Suberitida.

Group 11. SUBERITINA (new group).

(Proposed instead of the original groups 10, 11, and 12, viz. Cavernosa, Compacta, Laxa, and the subsequently added group, viz. Subcompacta, which the group Suberitina is intended to include as subdivisions.)

Spirastrella, Sdt. (Spongf. Küste v. Algier, 1868, p. 17, taf. iii. fig. 8).

General Observations.

This genus is chiefly characterized by its spiculation, consisting of a pin-like skeletal and spinispirular flesh-spicule. the latter, like most flesh-spicules, congregated more or less thickly into a layer on the surface; hence Schmidt placed it among his "Corticate" (!), our Pachytragida. But inasmuch as there are two kinds, if not species, of this sponge which possess the same form of spiculation, it becomes necessary to seek in the size of their spicules, their structures, and their adult forms respectively for their differences. Thus while the spicules in the original species, viz. Spirastrella cunctatrix, Sdt., may be set down as longer and thinner, those of the other kind or variety, which we shall term Spirastrella cunctatrix, var. robusta, are shorter and stouter (a fact of general occurrence too with adult spicules of all kinds even in the same specimen, as I have often stated).